

Appl. No. 10/065,922
Amdt dated SEP 25, 2003
Reply to Office Action of June 30, 2003

REMARKS/ARGUMENTS

Status of Application

Claims 1-20 are pending in the subject application. Claims 1-8, 11, 14, 17 and 20 are rejected under 35 USC § 102(e). Claims 9-10, 12-13, 15-16, 18 and 19 are rejected under 35 USC § 103(a). Figures 1 and 2 of the drawings are objected to. Applicants, by way of this response, have cancelled claims 6-10, 12 and 16-19 without prejudice and added new claims 21-23.

Objections to the Drawings

The drawings are objected to by the Examiner. In particular, Figures 1 and 2 should be labeled as prior art. In response, Applicant has amended Figures 1 and 2 to include the label "prior art". Amended Figures 1 and 2 are included in the attached replacement sheets for the Examiner's approval.

Rejections under 35 USC § 102

Claims 1-8, 11, 14, 17 and 20 are rejected under 35 USC § 102(e) as being anticipated by An (US 2003/0057462 A1). As for claims 6-8 and 17, Applicants have cancelled these claims without prejudice and submit that the rejection to these claims is moot. With respect to claims 1-7, 11 and 20, Applicants respectfully disagree with the Examiner's position.

Claims 1 and 20, as amended, recite an integrated circuit and method of fabricating an integrated circuit, respectively, having a feature formed on a substrate covered with an insulating layer. A radiation protection layer comprising a conductive material which is electrically isolated from the feature by the insulating layer, covering at least a portion of the feature sensitive to radiation. The radiation protection layer is sufficiently thick to reduce radiation damage to the portion of the feature sensitive to radiation.

In contrast, An only teaches the use of an insulating encapsulating barrier layer covering the capacitor to serve as a hydrogen barrier layer. The encapsulating layer is necessarily insulating, otherwise the electrodes of the capacitors would be shorted, rendering the capacitor inoperable. An nowhere teaches or suggests forming an insulating layer over the feature and covering at least a portion of the feature sensitive to radiation with a conductive

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radiation protection layer which is electrically isolated from the feature and which is sufficiently thick to reduce radiation damage to the portion of the feature which is sensitive to radiation. Therefore, Applicants submit that claims 1 and 20 are patentable over An. Since claims 2-7, 11, 14 and 21-23 are directly or indirectly dependent on either claim 1 or 20, Applicants submit that these claims are also patentable over An.

Rejections under 35 USC § 103

Claims 9-10, 12-13, 15-16, 18 and 19 are rejected under 35 USC § 103(a) as being unpatentable over An as applied to claims 8, 11, 14 and 17 above, and further in view of Haneder et al. (U.S. 2002/0125518 A1). Applicants submit that this basis of rejection to claims 9-10, 12, 16, and 18-19 is moot since these claims have been cancelled by way of this response. As for claims 13 and 15, Applicants respectfully disagree with the Examiner's position.

Claims 13 and 15, as amended, recite that the insulating layer which electrically isolates the conductive radiation protection layer from the feature serves as a hydrogen barrier layer. As discussed above, An only teaches encapsulating a capacitor with an insulating barrier layer. Haneder et al., on the other hand, teaches only using dielectric edge coverings on the sides of the capacitor. Applicants therefore submit that An and Haneder et al., alone or in combination, fail to teach or suggest providing an insulating layer covering a feature on a substrate and a conductive radiation protection layer electrically isolated from the feature by an insulating layer and which covers at least a portion of the feature which is sensitive to radiation to reduce radiation damage to the portion of the feature sensitive to radiation. As such, Applicants respectfully request withdrawal of rejection based on 35 USC § 103(a).

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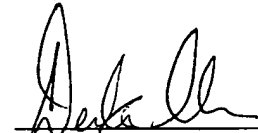
Conclusion

In view of the foregoing, Applicants believe that all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

Should the Examiner believe that a telephone conference would expedite prosecution of this application, please telephone the undersigned attorney at his number set out below.

Date: 9/25/03

Respectfully submitted,



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Attachments

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Replacement Sheet

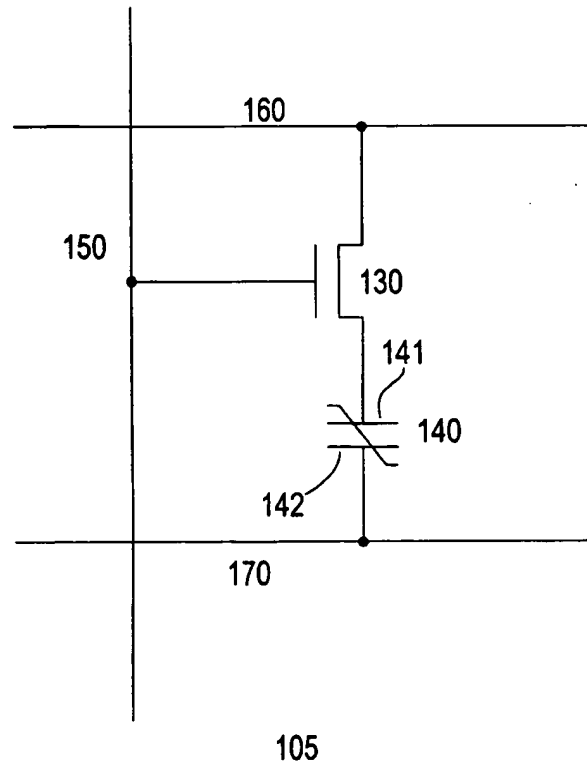


FIG 1

Prior Art

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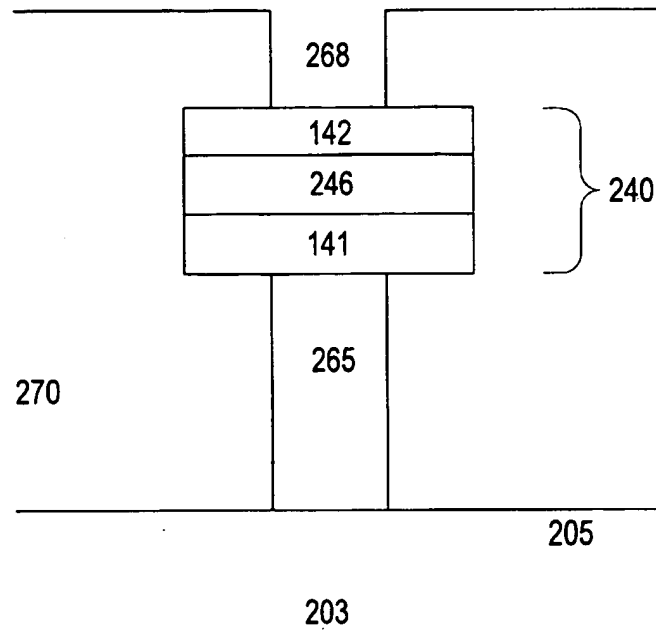


FIG 2

Prior Art

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Annotated Sheet Showing Changes

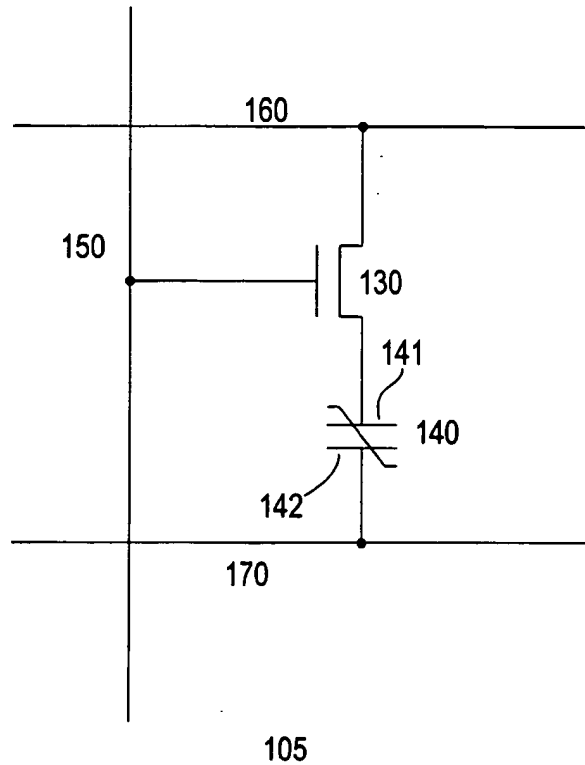


FIG 1

Prior Art

Legend "Prior Art" added

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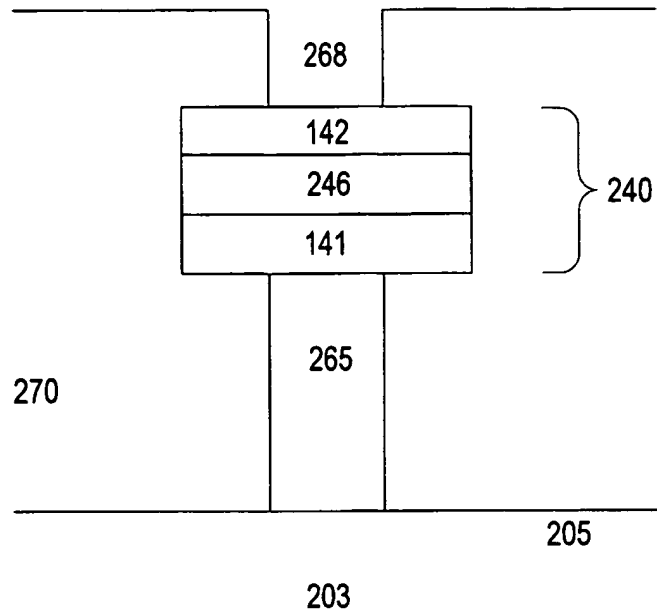


FIG 2

Prior Art

Legend "Prior Art" added